



Borregaard  
LignoTech

RECEIVED  
USDA NATIONAL  
ORGANIC PROGRAM

2005 AUG -8 P 3: 31

August 2, 2005

Arthur Neal  
Director, Program Administration  
National Organic Program  
USDA-AMS—TMP-NOP  
1400 Independence Avenue, SW  
Room 4008—So.  
Ag Stop 0268  
Washington, DC 20250

**Re.: TM-04-07 (National Organic Program, Sunset Review)**

Dear Director Neal,

LignoTech USA, Inc. is pleased to provide comment on the ANRP identified with the docket number TM-04-07. Specifically, LignoTech USA, Inc. it is LignoTech's recommendation that the NOP continue to allow the use of lignin sulfonate as a chelating agent, dust suppressant and/or flotation agent under 7 CFR Part 205.

Our recommendation is based on the following criteria:

Environmental: Lignin sulfonates are derivatives of lignin, the second most abundant polymer on the planet and a major source of naturally occurring organic soil matter. As such, lignin sulfonates are derived from a renewable resource, trees. If used as directed, lignin sulfonates are a safe and "natural" alternative to synthetic alternatives.

The U.S. EPA has recently reviewed the use of lignin sulfonates as inerts in pesticide formulations (Federal Register, February 16, 2005; Volume 70; No. 31; pp 7912 through 7921). After their review, lignin sulfonates were granted an exemption from the requirements of a tolerance under 40 CFR 180 (Federal Register, July 27, 2005; Volume 70; No. 143; pp 43309 through 43313). It was the EPA's opinion that lignin sulfonates were environmentally safe when used as directed. It was also their opinion that lignin sulfonates pose minimal risk to humans and animals and do not bioaccumulate in the environment.

The U.S. FDA has approved the use of lignin sulfonates as a binder in animal feed under 21 CFR 573.600. Use in this market for over 20+ years supports this approval and strongly supports the safety of such products in agriculture.

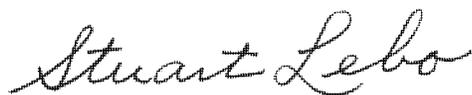
Additional FDA approvals for use in food packaging applications (21 CFR 176.210, 21 CFR 175.105, 21 CFR 176.170) and for use as a boiler water additive for steam that will contact food (21 CFR 173.310) also support the safety of lignin sulfonates when used as directed.

Organic Status: LignoTech USA, Inc. acknowledges that lignin sulfonates are not naturally occurring polymers. They are derivatives of the naturally occurring polymer lignin. They are produced from wood as a co-product in the papermaking process. Both calcium and sodium salts are available.

However, LignoTech USA, Inc. does contend that lignin sulfonates represent a best alternative to fully synthetic compounds. When used as chelating agents in foliar applications, they can significantly reduce the phytotoxicity of sulfate salts thereby reducing crop loss due to leaf burn. As dust control agents, they provide superior control while adding organic matter to the soil. In the case of calcium salts, they also add an often needed secondary nutrient. They are certainly a desirable alternative to petroleum-based dust control agents.

In brief, LignoTech USA, Inc. feels that, as derivatives of a natural organic polymer, lignin sulfonates are consistent with sustainable agriculture. They are environmentally safe and their use poses little risk to humans or other animals. In addition, they can add valuable organic matter to soils and allow for foliar applications of other plant nutrients.

Respectfully Submitted,



Dr. Stuart Lebo, Jr.  
Technology Manager Americas  
(715)-355-3628  
e-mail: [stu.lebo@borregaard.com](mailto:stu.lebo@borregaard.com)